

What is claimed is:

[Claim 1] 1. A polishing pad having a polishing surface, a back surface, and a sidewall connected to the polishing surface and the back surface, the polishing pad comprising:

a polishing region; and

at least one stress buffer pattern disposed in a region neighboring to the polishing region.

[Claim 2] 2. The polishing pad according to claim 1, wherein the stress buffer pattern is disposed on the polishing surface.

[Claim 3] 3. The polishing pad according to claim 1, wherein the stress buffer pattern is disposed on the back surface.

[Claim 4] 4. The polishing pad according to claim 1, wherein the stress buffer pattern is disposed on the polishing surface and the back surface.

[Claim 5] 5. The polishing pad according to claim 1, wherein the stress buffer pattern comprises a plurality of trenches or at least one opening.

[Claim 6] 6. The polishing pad according to claim 5, wherein depth of the trenches or the opening is less than half of the thickness of the polishing pad.

[Claim 7] 7. The polishing pad according to claim 1, wherein a cambered surface is further formed on the sidewall, while the cambered surface is adjacent to the polishing surface.

[Claim 8] 8. The polishing pad according to claim 1, wherein a cambered surface is further formed on a side surface of the stress buffer pattern, while the cambered surface is adjacent to the polishing surface.

[Claim 9] 9. The polishing pad according to claim 1, wherein the stress buffer pattern is disposed in a central region of the polishing pad.

[Claim 10] 10. The polishing pad according to claim 1, wherein the stress buffer pattern is disposed in an edge region of the polishing pad beside the polishing region.

[Claim 11] 11. A method for fabricating a polishing pad having a polishing surface, a back surface, and a sidewall connected to the polishing surface and the back surface, the method comprising forming a polishing region and a stress buffer pattern in a region neighboring to the polishing region.

[Claim 12] 12. The method according to claim 11, wherein the stress buffer pattern is formed via a mechanical process, a chemical process or a molding process.

[Claim 13] 13. The method according to claim 11, wherein the stress buffer pattern is formed on the polishing surface.

[Claim 14] 14. The method according to claim 11, wherein the stress buffer pattern is formed on the back surface.

[Claim 15] 15. The method according to claim 11, wherein the stress buffer pattern is formed on both the polishing surface and the back surface.

[Claim 16] 16. The method according to claim 11, further comprising formation of at least one cambered surface on the sidewall adjacent to the polishing surface so as to prevent particles from being generated due to abrasion of the sidewall during a polishing process.

[Claim 17] 17. The method according to claim 16, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.

[Claim 18] 18. The method according to claim 11, further comprising formation of at least one cambered surface at the join of the polishing surface and a side surface of the stress buffer pattern.

[Claim 19] 19. The method according to claim 18, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.

[Claim 20] 20. The method according to claim 11, wherein the stress buffer pattern is formed in a central region of the polishing pad.

[Claim 21] 21. The method according to claim 11, wherein the stress buffer pattern is formed in an edge region of the polishing pad beside the polishing region.

[Claim 22] 22. A polishing pad, having a polishing surface, a back surface, and a sidewall connected to the polishing surface and the back surface, characterized in that at least one cambered surface is formed on the sidewall adjacent to the polishing surface.

[Claim 23] 23. A method for fabricating a polishing pad that has a polishing surface, a back surface, and a sidewall connected to the polishing surface and the back surface, the method comprising formation of at least one cambered surface on the sidewall adjacent to the polishing surface.

[Claim 24] 24. The method according to claim 23, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.